

Work Order ID 162116

Friday, May 26, 2017 10:24:56 AM

162116

Page 1

Item ID: D5321-5 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Ring
Start Date: 5/29/2017 Start Qty: 100.00 ***100*** Cust Item ID:
Required Date: 6/5/2017 Req'd Qty: 100.00 ***100*** Customer:

Reference: **DAS**
13
Approvals: Process Plan: **9-89** Date: **MAY 26 2017** Tooling: Date: Run Start ***NR1***
QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D5321	B

100		0.00							DAS 13 9-89
100						100	MAY 26 2017		
Purchasing	Memo	0.00							
Purchasing	Issue P/O: 36461								
	Possible supplier: McMaster Carr								
	Supplier P/N: 9372T21								
	C of C is required.								
110	Receive & Inspect for Damage & Mat'l Certs	0.00							
110									
Packaging	Memo	0.00							
Packaging									

100x 8017-5-31

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER : ☐							

Work Order ID 162116

Friday, May 26, 2017 10:24:56 AM

162116

Page 2

Item ID: D5321-5

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Ring

Start Date: 5/29/2017 Start Qty: 100.00

100

Cust Item ID:

Required Date: 6/5/2017 Req'd Qty: 100.00

100

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

120

QC6- All purchased or subcontracted products

0.00

120

QC

Memo

0.00

Quality Control

100

MAY 31 2017

DAS
38
9-89

130

Identify as per dwg & Stock Location: **57468A**

0.00

130

Packaging

Memo

0.00

Packaging

100

JUN 02 2017

DAS
6
9-89

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.00

Quality Control

DAS
21
9-89

JUN 02 2017

17/6/5

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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Misidentified ☐	Past Due ☐																																																																

Picklist Print

Friday, May 26, 2017 10:24:54 AM

Page 1

Work Order ID: 162116

162116

Parent Item: D5321-5

D5321-5

Parent Item Name: Ring

Start Date: 5/29/2017

Required Date: 6/5/2017

Start Qty: 100.00

Required Qty: 100.00

Comments: IPP REV:A 16.03.28 AS PER DWG REV.B DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
9372T21 *9372T21* Ring		Purchased		No		100	Each	0.0000	1 **	100			

100XSP17-S-31

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

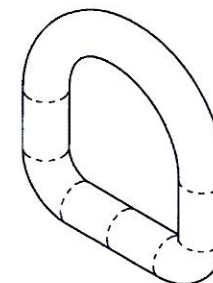
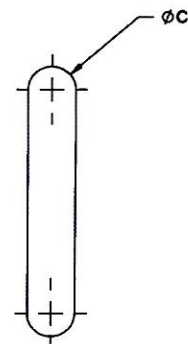
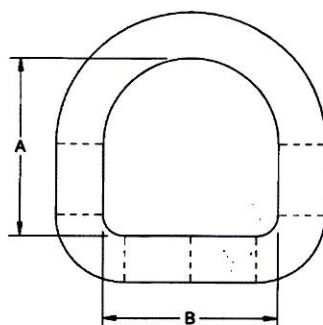
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	

Root Cause				FAULT CATEGORY			
Environment ☐	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐
Design ☐	☐	Operator	☐	Bending	☐	Set-up	☐
Doc/Data ☐	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐
Equip/Tooling ☐	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐
Handling/Pre ☐	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐
Material ☐	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐
Internal Transport ☐	☐	Poor Information	☐	Crushing	☐	Countersink	☐
Tribal Knowledge ☐	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐
LOA ☐	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐
Substation ☐	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐
Past Expiry Date ☐	☐	Manufacturing Process	☐	OTHER : _____			
Misidentified ☐	☐	Past Due	☐				

SPECIFICATION CONTROL DRAWING



MAY 26 2017

DAS
13
9-89

W/O: 162114

D5321-X RING

PART NUMBER	VENDOR	VENDOR P/N	BREAK STRENGTH	WORKING LOAD LIMIT	WEIGHT	DIM 'A'	DIM 'B'	DIM 'C'	MATERIAL
D5321-1	U.S.C.C.	MR15	6,000 lbs	2,000 lbs	0.22 lbs	1.50	1.45	0.39	ZINC PLATED STEEL
D5321-3	ANCRA	48557-11	5,000 lbs	1,666 lbs	0.09 lbs	1.50	1.50	0.25	CAD PLATED STEEL
D5321-5	MCMaster-CARR	9372T21	600 lbs	200 lbs	0.05 lbs	0.81	1.06	0.22	NICKEL PLATED STEEL

△

NOTES:

- 1) MATERIAL: SEE TABLE
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.7
- 7) WEIGHT: SEE TABLE

B	ADD D5321-5	DB	16.02.08
A	NEW RELEASE	DB	15.09.30
REV.	DESCRIPTION	BY	DATE
DESIGN	DB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AK		
CHECKED	ML	DRAWING NO.	REV. B
MFG. APPR.	DD	D5321	SHEET 1 OF 1
APPROVED	WM	TITLE	SCALE
DE APPR.	DSC	RING	NTS
DATE	16.02.08	COPYRIGHT © 2015 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

RELEASED
2016-03-23
2016-546

APPROVED



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO36461**

Purchase Order Date 5/26/2017

PO Print Date 5/26/2017

Page Number 1 of 6

Order From :

MCMaster-CARR SUPPLY CO,
P.O. BOX 7690
CHICAGO, IL 60680-7690
US

VU-MCM001

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

E-MAILED
EC-100-10
MAY 28 2017

Contact Name

Vendor Phone 330 995 5500

Ship To Contact

Ship To Phone

Ship Via: Purolator ground ppd

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 10

Currency

USD

FOB

FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	9372T21 AS PER DWG D5321 REV. B B162116	Ring	5/30/2017 Yes 5/30/2017	FN	100.00 Each	\$0.67	\$66.70
Line Total:							\$66.70
2	3132T2 AS PER DWG D5408 REV. A B162125	Suspension Rope (40ft length)	5/30/2017 Yes 5/30/2017	FN	10.00 Each	\$34.80	\$348.00
Line Total:							\$348.00

Note:

5/26/2017

200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Purchase Order
PO36461

Order Placed By
Chantal Lavoie

McMaster-Carr Number
3852658-01

Page 1 of 2

05/26/2017

Line	Product	Ordered	Shipped
1	9372T21 Welded Nickel-Plated Steel D-Ring for 1" Webbing Width, Packs of 10	10 Packs	10
8	7309T1 Mildew-Resistant Sponge 3-1/2" x 6" x 1", Yellow, Packs of 6	12 Packs	7
12	6519T146 Ultra-Chemical-Resistant Versilon PVC Tubing 3/8" ID, 9/16" OD, 10 Feet Long	180 Feet	130

SP17-5-31

Shipped separately from our Cleveland warehouse on 05/26

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9-89

2	3132T2 Low-Stretch Flexible Rope - Not for Lifting Polyester Cover, 5/32" Diameter, 40 Feet Length	400 Feet	400
3	3076T13 Tie-Down Ring Zinc-Plated Steel Ring & Clamp, 500 lb Work Load Limit, 2" ID	150 Each	150
4	98470A133 Shoulder-Style Ring-Grip Quick-Release Pin 18-8 Stainless Steel, 1/4" Diameter, 1-5/16" Usable Length	10 Each	10
5	7604K83 Button/Coin Cell Battery Silver Oxide, Size SR44, 160 mA-Hrs. Capacity	20 Each	20
6	7701K34 Button/Coin Cell Battery Lithium, Size CR2032	15 Each	15
7	71455K58 Size AA Alkaline Disposable Batteries	1 Pack	1
8	7309T1 Mildew-Resistant Sponge 3-1/2" x 6" x 1", Yellow	12 Packs	5
9	1931T47 Comfort-Grip Twine 1-lb. Tube, 0.116" Diameter	6 Each	6
10	9833K21 Breather Vent 1/8 NPT Male, 2 Maximum scfm, 7/16" Height	2 Each	2
11	6541K38 Vibration-Resistant Zinc-Plated Steel Double Pinch Clamps 31/64" to 19/32" ID, for Firm Hose and Tube	1 Pack	1
12	6519T146 Ultra-Chemical-Resistant Versilon PVC Tubing 3/8" ID, 9/16" OD, 10 Feet Long	180 Feet	50

Packing Lis

200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Purchase Order
PO36461

Order Placed By
Chantal Lavoie

McMaster-Carr Number
3852658-01

Page 2 of 2

05/26/2017

Line	Description	Ordered	Shipped
13	50715K676 37 Degree Flared Fitting for Stainless Steel Tubing Straight Adapter for 1/4" Tube OD, 7/16"-20 UNF Male	20 Each	20

McMaster-Carr Supply Company
200 New Canton Way
Robbinsville, NJ 08691-2345 USA
Phone: 330-995-5500 Fax: 330-995-9600
E-Mail: cle.sales@mcmaster.com
Employer Identification Number (EIN): 36-1458720

Invoice: 31791482
Purchase Order: PO36461
Release:
McMaster-Carr Number: 3852658-01

ORIGINAL COMMERCIAL
INVOICE
CERTIFICATE OF ORIGIN

Ultimate Destination:
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Shipped: 30-May-2017
Shipper's Export Declaration (SED):
NO EEI 30.36

Intermediate Consignee:

Bill To:
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Tax Number:

Forwarding Agent:

Billing
Attention:
Shipping
Attention:
Contact:

Line	Description	Qty & Unit	Unit Price	Extension
1	9372T21 Welded Nickel-Plated Steel D-Ring for 1" Webbing Width, Packs of 10 Country of Origin: Malaysia Schedule B #: 732690 ECCN #: EAR99 NLR	10 PK	\$6.67	\$66.70
8	7309T1 Mildew-Resistant Sponge 3-1/2" x 6" x 1", Yellow, Packs of 6 Country of Origin: United States Schedule B #: 392113 ECCN #: EAR99 NLR	7 PK	\$4.71	\$32.97
12	6519T146 Ultra-Chemical-Resistant Versilon PVC Tubing 3/8" ID, 9/16" OD, 10 Feet Long Country of Origin: United States Schedule B #: 391732 ECCN #: EAR99 NLR	130 FT	\$5.20	\$676.00
NOTE These items are controlled by the U.S. Government and authorized for export only to the country of ultimate destination for use by the ultimate consignee or end-user(s) herein identified. They may not be resold, transferred, or otherwise disposed of, to any other country or to any person other than the authorized ultimate consignee or end-user(s), either in their original form or after being incorporated into other items, without first obtaining approval from the U.S. government or as otherwise authorized by U.S. law and regulations.				
NOTE Tracking number(s) for this shipment: CPK005501614				
Your order is subject only to our terms and conditions, available at www.mcmaster.com or from our Sales Department.				

Shipping Weight (in kgs): 9

Number of Packages: 1

Package Dimensions:

43 X 52 X 51 CM = .114 CUBIC M

Invoice Amounts:

Merchandise Amount: \$775.67
Canadian GST/HST: \$103.83
Shipping Charges: \$23.01
Total (In USD): \$902.51

Payment Terms: 2% discount on merchandise only if paid within 10 days, net 30 days

Remit payment to:
(by mail)
McMaster-Carr Supply Company
PO Box 7690
Chicago, IL 60680-7690 USA

(by wire transfer)
Bank of America
222 Broadway
New York, NY 10038
Account 86666-02021
SWIFT BOFAUS3N

DAS
38
9-88

Authorized Signature:

Sarah Weinberg

Date: 30-May-2017

Name: Sarah Weinberg

Title: Operations Mgr.